```
### Status: Path 1 of [Dialog Information Services via Modem]

### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 3106900061...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
### Status: Signing onto Dialog
 ********
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
### Status: Connected


Dialog level 99.12.23D

Last logoff:  24feb00 17:58:29
Logon file001 25feb00 11:46:33
*** ANNOUNCEMENT ***
UPDATING RESUMED
***Kansas City Star (File 147)
                            ***
RELOADED
***Kompass Latin America (File 586)

     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                    ****
For news about price changes for Jan 1, 2000, enter
HELP NEWRATES.
                    ****

File   1:ERIC  1966-1999/Dec
       (c) format only 2000 The Dialog Corporation
*File   1: File has been reloaded. See HELP NEWS 1.
Limits of /ED and /EJ currently not working.

      Set  Items  Description
      ---  -----  -----------
?file agri
       25feb00 11:46:50 User259868 Session D12.1
            $0.19    0.055 DialUnits File1
     $0.19  Estimated cost File1
     $0.01  TYMNET
     $0.20  Estimated cost this search
     $0.20  Estimated total session cost   0.055 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File   5:Biosis Previews(R)  1969-2000/Jan W2
         (c) 2000 BIOSIS
*File   5: Updates renamed. See Help News5.
  File   6:NTIS  64-2000/Mar W2
         Comp&distr 1998 NTIS, Intl Copyright All Righ
  File  10:AGRICOLA  70-2000/Feb
         (c) format only 2000 The Dialog Corporation
  File  28:Oceanic Abst.  1964-2000/Mar
         (c) 2000 Cambridge Scientific Abstracts
  File  34:SciSearch(R) Cited Ref Sci  1990-2000/Feb W3
         (c) 2000 Inst for Sci Info
  File  44:Aquatic Sci&Fish Abs  1978-2000/Mar
         (c) 2000 FAO (for ASFA Adv Brd)
  File  50:CAB Abstracts  1972-2000/Feb
```

```
       (c) 2000 CAB International
   File  60:CRIS/USDA  1998/Sep
       (c) format only 1998 The Dialog Corporaion pl
   File  65:Inside Conferences  1993-2000/Apr W2
       (c) 2000 BLDSC all rts. reserv.
   File  76:Life Sciences Collection  1982-2000/Dec
       (c) 2000 Cambridge Sci Abs
   File  94:JICST-EPlus  1985-2000/Nov W1
       (c)2000 Japan Science and Tech Corp(JST)
   File  98:General Sci Abs/Full-Text  1984-1999/Oct
       (c) 1999 The HW Wilson Co.
   File  99:Wilson Appl. Sci & Tech Abs  1983-2000/Dec
       (c) 2000 The HW Wilson Co.
   File 117:Water Resour.Abs.  1967-2000/Jan
       (c) 2000 Cambridge Scientific Abs.
   File 143:Biol. & Agric. Index  1983-2000/Dec
       (c) 2000 The HW Wilson Co
   File 144:Pascal  1973-2000/Jan
       (c) 2000 INIST/CNRS
   File 203:AGRIS  1974-2000/Oct
       Dist by NAL, Intl Copr. All rights reserved
   File 266:FEDRIP  1999/DEC
       COMP & DIST BY NTIS, INTL COPYRIGHT ALL RIGHTS RES
   File 306:Pesticide Fact File  1998/Jun
       (c) 1998 BCPC
*File 306: File has been updated & reloaded.  See HELP NEWS 306.  New
Bluesheet available in F415 & at URL http://library.dialog.com/bluesheets.
  File 434:SciSearch(R) Cited Ref Sci  1974-1989/Dec
       (c) 1998 Inst for Sci Info

      Set  Items  Description
      ---  -----  -----------
?s plant(w) transformation
Processed  10 of  20 files ...
Completed processing all files
        3876935  PLANT
         622121  TRANSFORMATION
     S1    1527  PLANT(W) TRANSFORMATION
?s s1 (w) whatman?
          1527  S1
          1419  WHATMAN?
     S2       0  S1 (W) WHATMAN?
?s s1 (w) explant
          1527  S1
         18669  EXPLANT
     S3       0  S1 (W) EXPLANT
?s s1 (s)whatman?
          1527  S1
          1419  WHATMAN?
     S4       0  S1 (S)WHATMAN?
?s s1(s)explant
          1527  S1
         18669  EXPLANT
     S5      14  S1(S)EXPLANT
?rd
>>>Duplicate detection is not supported for File 60.
>>>Duplicate detection is not supported for File 306.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
     S6       5  RD (unique items)
?t

 6/2/1      (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
(c) 2000 BIOSIS. All rts. reserv.
```

12040895 BIOSIS NO.: 199900321414

Plant regeneration from mature Avena tissue explants.

AUTHOR: Hassan G(a); Zipf A(a); Sharma G C(a); Wesenberg D
AUTHOR ADDRESS: (a)Department of Plant and Soil Science, Alabama A and M University, Normal, AL, 35762**USA

JOURNAL: Cereal Research Communications 27 (1-2):p25-32 1999
ISSN: 0133-3720
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

REGISTRY NUMBERS: 94-75-7: 2 4-D; 1918-00-9: DICAMBA; 1918-02-1: PICLORAM

DESCRIPTORS:
MAJOR CONCEPTS: Agronomy (Agriculture); Methods and Techniques
BIOSYSTEMATIC NAMES: Gramineae--Monocotyledones, Angiospermae, Spermatophyta, Plantae
ORGANISMS: Avena (Gramineae)--grain crop
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Angiosperms; Monocots; Plants; Spermatophytes; Vascular Plants
CHEMICALS & BIOCHEMICALS: dicamba--plant growth regulator; picloram--plant growth regulator; 2,4-D--plant growth regulator
METHODS & EQUIPMENT: embryo explant culture--tissue culture method; hypocotyl explant culture--tissue culture method

CONCEPT CODES:
52504 Agronomy-Grain Crops
32500 Tissue Culture, Apparatus, Methods and Media
51514 Plant Physiology, Biochemistry and Biophysics-Growth Substances
51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods

BIOSYSTEMATIC CODES:
25305 Gramineae

Set	Items	Description
S1	1527	PLANT(W) TRANSFORMATION
S2	0	S1 (W) WHATMAN?
S3	0	S1 (W) EXPLANT
S4	0	S1 (S)WHATMAN?
S5	14	S1(S)EXPLANT
S6	5	RD (unique items)

6/9/1 (Item 1 from file: 5)

12040895 BIOSIS NO.: 199900321414

Plant regeneration from mature Avena tissue explants.

AUTHOR: Hassan G(a); Zipf A(a); Sharma G C(a); Wesenberg D
AUTHOR ADDRESS: (a)Department of Plant and Soil Science, Alabama A and M University, Normal, AL, 35762**USA

JOURNAL: Cereal Research Communications 27 (1-2):p25-32 1999
ISSN: 0133-3720
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: Successful **plant transformation** is dependent upon a reliable plant regeneration system. In cereals, immature embryos are the explants of choice but are inconvenient due to their temporal nature and maintenance requirements. The effects of three different auxins, 2,4-D, dicamba, and picloram, on two mature tissue **explant** types, mature embryo and hypocotyl, of three Avena genotypes, GAF/Park, Park, and 88Ab3073, were evaluated for callus formation, somatic embryogenesis (SE), and plant regeneration capabilities. Both mature embryo and hypocotyl explants were proliferated on modified Murashige and Skoog (MS) basal medium containing 5, 10, and 20 muM of each auxin and were regenerated on 1/2-MS medium without hormone. Although plant number was significantly correlated with SE number, it was not absolutely linked to a priori somatic embryogenesis, especially for 88AB3073 explants. While stimulating callus growth, both dicamba and picloram decreased embryogenicity and regenerability over that obtained with 2,4-D. Picloram may be useful for the isolation of SE-related genes as somatic embryogenesis in oat callus was strongly inhibited in the presence of picloram.

REGISTRY NUMBERS: 94-75-7: 2 4-D; 1918-00-9: DICAMBA; 1918-02-1: PICLORAM
DESCRIPTORS:
MAJOR CONCEPTS: Agronomy (Agriculture); Methods and Techniques
BIOSYSTEMATIC NAMES: Gramineae--Monocotyledones, Angiospermae, Spermatophyta, Plantae
ORGANISMS: Avena (Gramineae)--grain crop
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Angiosperms; Monocots; Plants; Spermatophytes; Vascular Plants
CHEMICALS & BIOCHEMICALS: dicamba--plant growth regulator; picloram--plant growth regulator; 2,4-D--plant growth regulator
METHODS & EQUIPMENT: embryo explant culture--tissue culture method; hypocotyl explant culture--tissue culture method
CONCEPT CODES:
52504 Agronomy-Grain Crops
32500 Tissue Culture, Apparatus, Methods and Media

51514 Plant Physiology, Biochemistry and Biophysics-Growth Substances
51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods
BIOSYSTEMATIC CODES:
25305 Gramineae

6/9/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

10704323 BIOSIS NO.: 199799325468
High frequency shoot regeneration from leaf explants of muskmelon.
AUTHOR: Yadav R C; Saleh Mohamed T; Grumet Rebecca(a)
AUTHOR ADDRESS: (a)Hortic. Dep., Mich. State Univ., East Lansing, MI 48824 **USA
JOURNAL: Plant Cell Tissue and Organ Culture 45 (3):p207-214 1996
ISSN: 0167-6857
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Efficient in vitro plant regeneration systems are critical for many purposes including **plant transformation** . Current regeneration systems for melon (Cucumis melo L.) plants generally utilize cotyledon explants; regeneration from melon leaves has received limited attention. We investigated several factors that influence regeneration from melon leaves including: genotype growth conditions and age of the source plant, leaf age, **explant** orientation, gelling agent, and the addition of silver nitrate and sulfonylurea herbicide to the culture media. Critical factors that influenced regeneration were preculture conditions of the donor plants, leaf size, and the use of silver nitrate and Phytagel in the medium. The best results were obtained with 3-4 cm diam leaves excised from pot grown greenhouse or growth chamber plants cultured on MS medium with 5 mu-M IAA, 5 mu-M BA, 1 mu-M ABA, 30 mu-M silver nitrate and 2.6 g l-1 Phytagel. Low concentrations of sulfonylurea herbicide (0.25 mg l-1 DPX-M 6316) also enhanced regeneration. Under optimized conditions 80-100% of the explants regenerated, with 10-100 shoots per **explant** .

REGISTRY NUMBERS: 7761-88-8: SILVER NITRATE; 74-85-1: ETHYLENE; 71010-52-1: PHYTAGEL; 21293-29-8: ABSCISIC ACID; 1214-39-7: BENZYLADENINE; 87-51-4: INDOLE-3-ACETIC ACID; 86-87-3Q: NAPHTHALENEACETIC ACID; 26445-01-2Q: NAPHTHALENEACETIC ACID
DESCRIPTORS:
MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Cell Biology; Chemical Coordination and Homeostasis; Development; Methods and Techniques; Morphology; Pest Assessment Control and Management; Systematics and Taxonomy
BIOSYSTEMATIC NAMES: Cucurbitaceae--Dicotyledones, Angiospermae, Spermatophyta, Plantae
ORGANISMS: muskmelon (Cucurbitaceae); Cucumis melo (Cucurbitaceae)
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): angiosperms; dicots; plants; spermatophytes; vascular plants
CHEMICALS & BIOCHEMICALS: SILVER NITRATE; ETHYLENE; PHYTAGEL; ABSCISIC ACID; BENZYLADENINE; INDOLE-3-ACETIC ACID; NAPHTHALENEACETIC ACID
MISCELLANEOUS TERMS: Research Article; ABSCISIC ACID; AGE; BENZYLADENINE; CONDITIONS; COTYLEDON; DEVELOPMENT; ETHYLENE ACTION INHIBITOR; EXPLANT; GELLING AGENT; GENOTYPE; GROWTH; HERBICIDE; HIGH FREQUENCY REGENERATION; IN VITRO PLANT REGENERATION; INDOLE-3-ACETIC ACID; LEAF; METHODOLOGY; MISCELLANEOUS METHOD; MURASHIGE AND SKOOG MEDIUM; NAPHTHALENEACETIC ACID; ORIENTATION; PHYTAGEL; PLANT GROWTH REGULATOR; SHOOT; SILVER NITRATE; SULFONYLUREA
CONCEPT CODES:
02504 Cytology and Cytochemistry-Plant
10060 Biochemical Studies-General
50526 Botany, General and Systematic-Dicotyledones
51000 Morphology, Anatomy and Embryology of Plants

51510 Plant Physiology, Biochemistry and Biophysics-Growth, Differentiation
51514 Plant Physiology, Biochemistry and Biophysics-Growth Substances
51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods
54600 Pest Control, General; Pesticides; Herbicides
BIOSYSTEMATIC CODES:
25890 Cucurbitaceae

6/9/3 (Item 3 from file: 5)

09674295 BIOSIS NO.: 199598129213
The competence of cells for cell division and regeneration in tobacco explants depends on cellular location, cell cycle phase and ploidy level.
AUTHOR: Gilissen Luud J W(a); Van Staveren Marjo J; Hakkert Johanna C; Smulders Marinus J M; Verhoeven Harrie A; Creemers-Molenaar Jantina
AUTHOR ADDRESS: (a)Dep. Cell Biol., DLO-Cent. Plant Breed. Reprod. Res., P.O. Box 16, NL-6700 AA Wageningen**Netherlands
JOURNAL: Plant Science (Limerick) 103 (1):p81-91 1994
ISSN: 0168-9452
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: This work concerns application of flow cytometry (FCM) and confocal laser scanning microscopy (CLSM) to investigate the competence of cells for cell division and regeneration. FCM analysis of freshly-cut thin cell layer (TCL) explants of Nicotiana tabacum, excised from upper internodes of vegetative plants, revealed that one-quarter of the cells had the 2C nuclear DNA content, whereas of the other cells most nuclei had the 4C and some had the 8C DNA content. Cytometric examination using CLSM showed that the 2C nuclei were mainly located in the epidermis and subepidermis, and the 4C nuclei predominantly in the cortical tissue. During culture of the explants, part of the cortical cells went through mitosis from the first day onwards, and formed callus from which predominantly diploid and some tetraploid roots regenerated at low frequency. Most cortical cells were thus in the G-2 phase of the diploid cell cycle. FCM analysis showed that another fraction of the 4C cortical cells was induced to endoreduplicate to 8C cells. These cells thus had previously switched to the G-1 phase of the tetraploid cell cycle. CLSM analysis revealed that subepidermal and epidermal cells, respectively, underwent cell division from the second and third day onwards. Shoot primordia developed from cells of both cell layers together. Most shoot regenerants were normal diploids, some were mixoploids or tetraploids. The combination of FCM and CLSM allowed identification of the cell cycle phase, the ploidy level, the position of the cell, and the cellular development. The results give insight into the involvement of these parameters in the competence for cell division and regeneration at the level of the individual **explant** cells, and are therefore relevant for cellular and molecular approaches to **plant transformation** .

DESCRIPTORS:
MAJOR CONCEPTS: Cell Biology; Development; Genetics; Methods and Techniques
BIOSYSTEMATIC NAMES: Solanaceae--Dicotyledones, Angiospermae, Spermatophyta, Plantae
ORGANISMS: Nicotiana tabacum (Solanaceae)
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): angiosperms; dicots; plants; spermatophytes; vascular plants
MISCELLANEOUS TERMS: CONFOCAL LASER SCANNING MICROSCOPY; FLOW CYTOMETRY ; PLANT TRANSFORMATION
CONCEPT CODES:
02504 Cytology and Cytochemistry-Plant

03504 Genetics and Cytogenetics-Plant
32500 Tissue Culture, Apparatus, Methods and Media
51510 Plant Physiology, Biochemistry and Biophysics-Growth, Differentiation
51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods
01052 Microscopy Techniques-General and Special Techniques
BIOSYSTEMATIC CODES:
26775 Solanaceae

6/9/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09542573 BIOSIS NO.: 199497550943
Factors that affect leaf regeneration efficiency in apple, and effect of antibiotics in morphogenesis.
AUTHOR: Yepes Luz Marcella; Aldwinckle Herb S
AUTHOR ADDRESS: Dep. Plant Pathol., Cornell Univ., NYS Agric. Exp. Stn., Geneva, NY 14456**USA
JOURNAL: Plant Cell Tissue and Organ Culture 37 (3):p257-269 1994
ISSN: 0167-6857
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Several factors that affect the frequency of organogenesis in apple leaf explants were examined for the scion cultivars 'Empire', 'Freedom', 'Golden Delicious', 'Liberty', 'McIntosh', and 'Mutsu' and for the rootstocks Malling 7A and Malling 26. The main factors affecting morphogenesis were BA concentration, basal medium, leaf **explant** origin and maturity, **explant** orientation, and photosynthetic photon flux. Depending on the genotype, optimal regeneration was obtained using either 22.2 or 31.1 mu-M BA and the N6 basal medium, with the exception of 'Golden Delicious' which regenerated better on MS medium. After 6 weeks, the average number of shoots per segment varied from 5 to 16, and the percentage of regeneration between 70 and 100%, depending on the genotype tested and the maturity of the **explant** . Regeneration capacity increased dramatically from the tip towards the base of the leaf, and was higher from the middle to the proximal end. Cefotaxime and carbenicillin, two antibiotics commonly used during transformation studies to eliminate Agrobacterium tumefaciens from plant tissue, were tested to determine their effect on morphogenesis. Cefotaxime at a dose of 250 mg 1-1 enhanced regeneration and shoot development, whereas carbenicillin at a dose of 500 mg 1-1 induced abundant callus formation and inhibited regeneration. Kanamycin, a widely used selection agent for **plant transformation** , strongly inhibited regeneration even at very low doses. Schemes for selection and recovery of transgenic apple plants when kanamycin is used as the selection agent are discussed.

REGISTRY NUMBERS: 1214-39-7: BENZYLADENINE; 63527-52-6: CEFOTAXIME; 4697-36-3: CARBENICILLIN; 59-01-8Q: KANAMYCIN; 8063-07-8Q: KANAMYCIN
DESCRIPTORS:
MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Development; Genetics; Infection; Methods and Techniques; Morphology; Pest Assessment Control and Management; Physiology
BIOSYSTEMATIC NAMES: Rhizobiaceae--Eubacteria, Bacteria; Rosaceae--Dicotyledones, Angiospermae, Spermatophyta, Plantae
ORGANISMS: Agrobacterium tumefaciens (Rhizobiaceae); Malus domestica (Rosaceae)
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): angiosperms; bacteria; dicots; eubacteria; microorganisms; plants; spermatophytes; vascular plants
CHEMICALS & BIOCHEMICALS: BENZYLADENINE; CEFOTAXIME; CARBENICILLIN; KANAMYCIN
MISCELLANEOUS TERMS: BASAL MEDIUM; BENZYLADENINE CONCENTRATION; CALLUS

FORMATION; CARBENICILLIN; CEFOTAXIME; CULTIVAR EMPIRE; CULTIVAR FREEDOM ; CULTIVAR GOLDEN DELICIOUS; CULTIVAR LIBERTY; CULTIVAR MCINTOSH; CULTIVAR MUTSU; EXPLANT ORIENTATION; GENOTYPE; KANAMYCIN; LEAF EXPLANT ORIGIN; PHOTOSYNTHETIC PHOTON FLUX; REGENERATION INHIBITION; ROOTSTOCK MALLING 26; ROOTSTOCK MALLING 7A

CONCEPT CODES:

03504 Genetics and Cytogenetics-Plant
10010 Comparative Biochemistry, General
31000 Physiology and Biochemistry of Bacteria
32500 Tissue Culture, Apparatus, Methods and Media
51000 Morphology, Anatomy and Embryology of Plants
51510 Plant Physiology, Biochemistry and Biophysics-Growth, Differentiation
51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods
54504 Phytopathology-Diseases Caused by Bacteria
54600 Pest Control, General; Pesticides; Herbicides
10060 Biochemical Studies-General
25508 Developmental Biology-Embryology-Morphogenesis, General

BIOSYSTEMATIC CODES:

06509 Rhizobiaceae (1992-)
26675 Rosaceae

6/9/5 (Item 1 from file: 203)

DIALOG(R)File 203:AGRIS

02018105 AGRIS No: 96-105731

Histology of somatic embryogenesis and evaluation of somaclonal variation ([Histologia de embriogenesis somatica y evaluacion de variacion somaclonal])

Raemakers, C.J.J.M.; Jacobsen, Evert; Visser, Richard G.F.

Conference Title: 2.The Cassava Biotechnology Network
Conference Location and Year: Bogor (Indonesia), 2-26 Aug 1994

The Cassava Biotechnology Network : proceedings of the second international scientific meeting, Bogor, Indonesia, 22-26 August 1994 ([La red de biotecnologia de yuca : memorias de la segunda reunion cientifica internacional, Bogor, Indonesia, 22-26 agosto 1994])

Centro Internacional de Agricultura Tropical, Cali (Colombia)
Publisher: CIAT , Cali (Colombia), 1995, v. 1 p. 336-354
Series title: Working document (CBN; CRIFC; AARD; CIAT), no. 150
Notes: (Accession no. SB211.C3C372)
Notes: Ill., 18 ref.
Language: English Summary Language: English
Place of Publication: Colombia
Availability: CIAT (Intl Centre for Tropical Agriculture) Center
Document Type: Analytic, Monograph, Conference, Summary, Nonconventional Literature
Journal Announcement: 2209 Record input by CIAT (Intl Centre for Tropical Agriculture)

Abstract in English

Genetic modification of cassava is dependent on the availability of efficient regeneration procedures and the resulting plants should be true to type. A system has been developed where somatic embryos can be culture to produce secondary embryos (cyclic somatic embryogenesis). The origin of secondary embryos was studied using histological and scanning electron microscopical techniques. It was concluded that secondary embryos originate directly from the **explant** , from internal cell layers and from multiple cells. These three characteristics explain the difficulties observed in using somatic embryogenesis for **plant transformation** purposes. Strategies to overcome these problems will be discussed. Further, it was observed that most mature embryos did not possess a root meristem because of the callusing effect of 2,4-D. This might explain the difficulties observed with shoot conversion of somatic embryos. An advantage of the multicellular origin of somatic embryos is the fact that

it might give rise to genetically stable plants. Although a clear example of genetic induced variation was found, it was concluded that the regeneration process was not accompanied with clear negative plant development characteristics.
Descriptors in English: *MANIHOT ESCULENTA; *IN VITRO CULTURE; *SOMATIC EMBRYOS; *EMBRYONIC DEVELOPMENT; *PLANT TISSUES; BIOLOGICAL DEVELOPMENT; CULTURE TECHNIQUES; DEVELOPMENTAL STAGES; EUPHORBIACEAE; MANIHOT; PLANT ANATOMY; PLANT DEVELOPMENTAL STAGES; PLANT EMBRYOS;

Descriptors in Spanish: *MANIHOT ESCULENTA; *CULTIVO IN VITRO; *EMBRION SOMATICO; *DESARROLLO EMBRIONARIO; *TEJIDOS VEGETALES; ANATOMIA DE LA PLANTA; DESARROLLO BIOLOGICO; EMBRIONES VEGETALES; ETAPAS DE DESARROLLO; ETAPAS DE DESARROLLO DE LA PLANTA; EUPHORBIACEAE; MANIHOT; TECNICAS DE CULTIVO;

Descriptors in French: *MANIHOT ESCULENTA; *CULTURE IN VITRO; *EMBRYON SOMATIQUE; *DEVELOPPEMENT EMBRYONNAIRE; *TISSU VEGETAL; ANATOMIE VEGETALE; DEVELOPPEMENT BIOLOGIQUE; EMBRYON VEGETAL; EUPHORBIACEAE; MANIHOT; STADE DE DEVELOPPEMENT; STADE DE DEVELOPPEMENT VEGETAL; TECHNIQUE DE CULTURE;
Section Headings: F02 (PLANT PRODUCTION -- Plant propagation) ; F62 (PLANT PRODUCTION -- Plant physiology - growth and development)
?
PLEASE ENTER A COMMAND OR BE LOGGED OFF IN 5 MINUTES
?

Status: Signed Off. (24 minutes)

Status: Path 1 of [Dialog Information Services via Modem]

Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 3106900061...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
******** HHHHHHHH SSSSSSSS?
Status: Signing onto Dialog
****
ENTER PASSWORD:
******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
Status: Connected

Dialog level 99.12.23D

Reconnected in file AGRI 25feb00 12:13:43

SYSTEM:OS - DIALOG OneSearch
File 5:Biosis Previews(R) 1969-2000/Jan W2
(c) 2000 BIOSIS
*File 5: Updates renamed. See Help News5.
File 6:NTIS 64-2000/Mar W2
Comp&distr 1998 NTIS, Intl Copyright All Righ
File 10:AGRICOLA 70-2000/Feb
(c) format only 2000 The Dialog Corporation
File 28:Oceanic Abst. 1964-2000/Mar
(c) 2000 Cambridge Scientific Abstracts
File 34:SciSearch(R) Cited Ref Sci 1990-2000/Feb W3
(c) 2000 Inst for Sci Info
File 44:Aquatic Sci&Fish Abs 1978-2000/Mar
(c) 2000 FAO (for ASFA Adv Brd)
File 50:CAB Abstracts 1972-2000/Feb
(c) 2000 CAB International
File 60:CRIS/USDA 1998/Sep
(c) format only 1998 The Dialog Corporaion pl

```
    File  65:Inside Conferences  1993-2000/Apr W2
          (c) 2000 BLDSC all rts. reserv.
    File  76:Life Sciences Collection  1982-2000/Dec
          (c) 2000 Cambridge Sci Abs
    File  94:JICST-EPlus  1985-2000/Nov W1
          (c)2000 Japan Science and Tech Corp(JST)
    File  98:General Sci Abs/Full-Text  1984-1999/Oct
          (c) 1999 The HW Wilson Co.
    File  99:Wilson Appl. Sci & Tech Abs  1983-2000/Dec
          (c) 2000 The HW Wilson Co.
    File 117:Water Resour.Abs.  1967-2000/Jan
          (c) 2000 Cambridge Scientific Abs.
    File 143:Biol. & Agric. Index  1983-2000/Dec
          (c) 2000 The HW Wilson Co
    File 144:Pascal  1973-2000/Jan
          (c) 2000 INIST/CNRS
    File 203:AGRIS  1974-2000/Oct
          Dist by NAL, Intl Copr. All rights reserved
    File 266:FEDRIP  1999/DEC
          COMP & DIST BY NTIS, INTL COPYRIGHT ALL RIGHTS RES
    File 306:Pesticide Fact File  1998/Jun
          (c) 1998 BCPC
*File 306: File has been updated & reloaded.  See HELP NEWS 306.  New
Bluesheet available in F415 & at URL http://library.dialog.com/bluesheets.
    File 434:SciSearch(R) Cited Ref Sci  1974-1989/Dec
          (c) 1998 Inst for Sci Info

       Set  Items  Description
       ---  -----  -----------
? s plant (s) transformation
Processed  10 of  20 files ...
Completed processing all files
         3876935  PLANT
          622121  TRANSFORMATION
      S7   16849  PLANT (S) TRANSFORMATION
?s s7 (s) moisture
           16849  S7
          287648  MOISTURE
      S8      74  S7 (S) MOISTURE
?rd
>>>Duplicate detection is not supported for File 60.
>>>Duplicate detection is not supported for File 306.

>>>Records from unsupported files will be retained in the RD set.
...examined 50 records  (50)
>>>Record 266:270999 ignored; incomplete bibliographic data, not retained -
in RD set
>>>Record 266:269052 ignored; incomplete bibliographic data, not retained -
in RD set
...completed examining records
      S9      55  RD (unique items)
?s s9 (s) reduction
             55  S9
        1350820  REDUCTION
     S10      5  S9 (S) REDUCTION
?show files;ds;t s10/full/all
File   5:Biosis Previews(R) 1969-2000/Jan W2
         (c) 2000 BIOSIS
File   6:NTIS 64-2000/Mar W2
         Comp&distr 1998 NTIS, Intl Copyright All Righ
File  10:AGRICOLA 70-2000/Feb
         (c) format only 2000 The Dialog Corporation
File  28:Oceanic Abst. 1964-2000/Mar
         (c) 2000 Cambridge Scientific Abstracts
File  34:SciSearch(R) Cited Ref Sci 1990-2000/Feb W3
         (c) 2000 Inst for Sci Info
```

File 44:Aquatic Sci&Fish Abs 1978-2000/Mar
(c) 2000 FAO (for ASFA Adv Brd)
File 50:CAB Abstracts 1972-2000/Feb
(c) 2000 CAB International
File 60:CRIS/USDA 1998/Sep
(c) format only 1998 The Dialog Corporaion pl
File 65:Inside Conferences 1993-2000/Apr W2
(c) 2000 BLDSC all rts. reserv.
File 76:Life Sciences Collection 1982-2000/Dec
(c) 2000 Cambridge Sci Abs
File 94:JICST-EPlus 1985-2000/Nov W1
(c)2000 Japan Science and Tech Corp(JST)
File 98:General Sci Abs/Full-Text 1984-1999/Oct
(c) 1999 The HW Wilson Co.
File 99:Wilson Appl. Sci & Tech Abs 1983-2000/Dec
(c) 2000 The HW Wilson Co.
File 117:Water Resour.Abs. 1967-2000/Jan
(c) 2000 Cambridge Scientific Abs.
File 143:Biol. & Agric. Index 1983-2000/Dec
(c) 2000 The HW Wilson Co
File 144:Pascal 1973-2000/Jan
(c) 2000 INIST/CNRS
File 203:AGRIS 1974-2000/Oct
Dist by NAL, Intl Copr. All rights reserved
File 266:FEDRIP 1999/DEC
COMP & DIST BY NTIS, INTL COPYRIGHT ALL RIGHTS RES
File 306:Pesticide Fact File 1998/Jun
(c) 1998 BCPC
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 1998 Inst for Sci Info

Set	Items	Description
S1	1527	PLANT(W) TRANSFORMATION
S2	0	S1 (W) WHATMAN?
S3	0	S1 (W) EXPLANT
S4	0	S1 (S)WHATMAN?
S5	14	S1(S)EXPLANT
S6	5	RD (unique items)
S7	16849	PLANT (S) TRANSFORMATION
S8	74	S7 (S) MOISTURE
S9	55	RD (unique items)
S10	5	S9 (S) REDUCTION

10/9/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2000 BIOSIS. All rts. reserv.

10330220 BIOSIS NO.: 199698785138
On the rate of water loss of forage grasses and legumes in the primary growth at defined stages of growth.
AUTHOR: Kammerl Rita; Simon Uwe
AUTHOR ADDRESS: Technische Univ. Muenchen, Lehrstuhl Gruenlandlehre, D-85350 Freising-Weihenstephan**Germany
JOURNAL: Wirtschaftseigene Futter 41 (2):p182-195 1995
ISSN: 0049-7711
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: German; Non-English
SUMMARY LANGUAGE: German; English

ABSTRACT: The rate of water loss in 19 species and cultivars of forage grasses and legumes was investigated in two series of experiments during the primary growth at four consecutive stages of **plant** development. During a drying period of ten or six hours, respectively, at 50 degree C, the water loss of the plants was determined in hourly intervals. The average initial water content was 82,4%; the average final water content

was 43,7%. Within this range of humidity, and after **transformation** of the relative water content to log n% **moisture** degree, the rate of water loss is significantly linear. Under this condition, the water loss can be described by the linear regression equation y = a + bx. The coefficient of regression b indicates the rate of water loss. Both the initial water content and the rate of water loss vary significantly with the species/variety, the stage of maturity and the year of harvest. Among the grasses the rate of water loss is fastest in Poa pratensis, slowest in Phleum pratense and Festuca pratensis. The drying rate of Lolium and Dactylis glomerata varies according to the investigated cultivars. The diploid type is more suitable for drying than the tetraploid. The **reduction** of water content in the grasses is slower during ear emergence than at stem elongation and flowering, respectively. The rate of water loss in legumes compares favorably with that of the grasses. Consequently, the final water content of legumes and grasses are similar, despite the generally higher initial water content of the legumes. Trifolium repens ability to evaporate water is superior. Medicago sativa shows also very good drying characteristics. Trifolium resupinatum and alexandrinum surpass Trifolium pratense in the rate of water loss.

DESCRIPTORS:
MAJOR CONCEPTS: Agronomy (Agriculture); Biochemistry and Molecular Biophysics; Development; Physiology; Reproduction
BIOSYSTEMATIC NAMES: Gramineae--Monocotyledones, Angiospermae, Spermatophyta, Plantae; Leguminosae--Dicotyledones, Angiospermae, Spermatophyta, Plantae; Plantae-Unspecified--Plantae
ORGANISMS: plant (Plantae - Unspecified); Dactylis glomerata (Gramineae); Festuca pratensis (Gramineae); Lolium (Gramineae); Medicago sativa (Leguminosae); Phleum pratense (Gramineae); Poa pratensis (Gramineae); Trifolium alexandrinum (Leguminosae); Trifolium pratense (Leguminosae); Trifolium repens (Leguminosae); Trifolium resupinatum (Leguminosae)
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): angiosperms; dicots; monocots; plants; spermatophytes; vascular plants
INDUSTRY: crop industry
MISCELLANEOUS TERMS: FLOWERING; VEGETATIVE GROWTH; 19 GRASS AND LEGUME SPECIES AND CULTIVARS
CONCEPT CODES:
10011 Biochemistry-Physiological Water Studies (1970-)
51502 Plant Physiology, Biochemistry and Biophysics-Water Relations
51510 Plant Physiology, Biochemistry and Biophysics-Growth, Differentiation
51512 Plant Physiology, Biochemistry and Biophysics-Reproduction
52506 Agronomy-Forage Crops and Fodder
BIOSYSTEMATIC CODES:
25305 Gramineae
26260 Leguminosae

10/9/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

02721725 BIOSIS NO.: 000068032321
CAUSES FOR THE DETERIORATION OF PASTURES IN THE KARA-KUM USSR
AUTHOR: MIROSHNICHENKO YU M
AUTHOR ADDRESS: V.L. KOMAROV BOT. INST., ACAD. SCI. USSR, LENINGRAD, USSR.
JOURNAL: RASTIT RESUR 14 (4). 1978. 469-477.
FULL JOURNAL NAME: Rastitel'nye Resursy
CODEN: RRESA
RECORD TYPE: Abstract
LANGUAGE: RUSSIAN

ABSTRACT: A 1965-1977 study of dry pasture phytocenoses in grazed and ungrazed portions of the Kara Kum desert (Turkmen SSR, USSR) concluded that the primary factor in the deterioration of the **plant** cover was anthropogenic. Irrational use of the open pasture land was characterized

by overgrazing with sheep and camels near water and undergrazing in portions with no practical access to water, resulting in the latter case in the overgrowth of the desert moss Tortula desertorum. The moss prevented **moisture** from reaching the topsoil and resulted in a change of the species composition of sedge-sexaul phytocenoses and **reduction** of green phytomass. Overgrazing resulted in elimination of virtually all **plant** cover and **transformation** of the pasture land into sand dunes. Ameliorative measures suggested include winter sheep pasturage in outlying pastures at least once every 3 yr and harrowing of the sod surface.

DESCRIPTORS: TORTULA-DESERTORUM SEDGE SAXAUL SHEEP CAMELS OVER GRAZING WATER ACCESSIBILITY
CONCEPT CODES:
00512 General Biology-Conservation, Resource Management
26504 Animal Production-Feeds and Feeding
52506 Agronomy-Forage Crops and Fodder
52807 Soil Science-Fertility and Applied Studies (1970-)
BIOSYSTEMATIC CODES:
21600 Musci
25280 Cyperaceae
25795 Chenopodiaceae
85715 Bovidae
85720 Camelidae
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA):
Plants
Nonvascular Plants
Bryophytes
Vascular Plants
Spermatophytes
Angiosperms
Monocots
Dicots
Animals
Chordates
Vertebrates
Nonhuman Vertebrates
Mammals
Nonhuman Mammals
Artiodactyls

10/9/3 (Item 1 from file: 50)
DIALOG(R)File 50:CAB Abstracts

01712804 CAB Accession Number: 860784509
Study of the action mechanism of the herbicide paraquat.
Original Title: A paraquat herbicid hatasmechanizmusanak vizsgalata.
Hunyadi, K.
Agrartudomanyi Egyetem, Keszthely, Hungary.
A Keszthelyi Mezogazdasagtudomanyi Karon elfogadott doktori disszertaciok jegyzeke vol. 1 p.85-86
Publication Year: 1983
Language: Hungarian
Document Type: Journal article
Energy for chemical **reduction** of paraquat in the **plant** is supplied by photosynthesis. When molecular oxygen induces recombination, hydrogen peroxide is formed as a byproduct which destroys the **plant** cells. Sunshine increases the speed of chemical **transformation** , while high **moisture** content increased adsorption and translocation of the paraquat. Clay or peat in the soil adsorbed paraquat without inactivating it. Dust cover on the foliage reduced the effect of paraquat on the **plant** .

DESCRIPTORS: Paraquat; physiology; mode of action; photosynthesis; adsorption; translocation; degradation; soil; photolysis; weeds;

herbicides
CAS REGISTRY NUMBERS: 4685-14-7; 1910-42-5; 2074-50-2
GEOGRAPHIC NAMES: Hungary
BROADER TERMS: quaternary ammonium herbicides; herbicides; pesticides; plants; Central Europe; Europe
CABICODES: Control by Chemicals & Drugs (HH400); Weeds & Noxious Plants (FF500); Soil Science (JJ000)

10/9/4 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00149193 JICST ACCESSION NUMBER: 85A0483180 FILE SEGMENT: JICST-E
Effects of oxidation-reduction potential and oxygen concentration on transformation of nitrate nitrogen in soil.
ITO HIDEFUMI (1); ARAKI KOICHI (1)
(1) Vegetable and Ornamental Crops Res. Stn.
Yasai Shikenjo Hokoku. A(Bulletin of the Vegetable and Ornamental Crops Research Station. Series A), 1984, NO.12, PAGE.119-129, FIG.13, TBL.1, REF.24
JOURNAL NUMBER: Z0733AAE ISSN NO: 0387-5407 CODEN: YSHAD
UNIVERSAL DECIMAL CLASSIFICATION: 631.41/.43
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication
ABSTRACT: Recently, intensive soil management practices are being adopted in vegetable cultivation such as submerging and leaching for removing the excess of nitrate and salts, application of a large amount of organic matter for improving the physical, chemical and biological properties of soil and solar sterilization in closed vinyl houses for the control of soil-borne pathogens. Such practices promote the **transformation** of NO3- compounds into NO2- compounds, NO and NO2 which adversely affect **plant** growth and to N2O and N2 which easily undergo a denitrification process. In this paper the relationship between NO3- **reduction** and oxidation-**reduction** potential or oxygen concentration (upland conditions) in soil were investigated by incubation experiments in order to obtain an index reflecting the **transformation** process of nitrate nitrogen. In the incubation experiments, glass bottles (300 ml) sealed with rubber caps fitted with silicon septa were used. Soil **moisture** was controled to reach upland conditions (60% of water holding capacity) and submerged conditions, respectively. Initial soil pH was adjusted to about 7.0 and 7.5. In order to stimulate the **reduction** process, 400mg glucose per 100g dry soil were added but the air in the bottles was not replaced. Besides the incubation experiments N2O production under upland conditions was investigated in an open system in relation to the oxidation-**reduction** potential and oxygen concentration in soil. 1. Effect of changes in the oxidation-**reduction** potential on the **transformation** of nitrate nitrogen in soil (1) **Reduction** of NO3- to NO2- in the soil began at values of the oxidation-**reduction** potential (Eh6) of 600-650mV. Accumulation of NO2- was maximum at values of 460-490mV and the NO3- level decreased by half. Nitrate almost disappeared at values of about 440mV under submerged conditions and 250-350mV under upland conditions. (abridged author abst.)
DESCRIPTORS: nitrate nitrogen; oxidation-reduction potential; oxygen; concentration(ratio); reduction(reaction); impounding; upland field soil; nitrogen dioxide; dinitrogen oxide; soil atmosphere
BROADER DESCRIPTORS: nitrogen form; element form; electric potential; oxygen group element; element; second row element; degree; chemical reaction; ponding; storage; cultivated soil; soil; nitrogen oxide; oxide; chalcogenide; oxygen group element compound; oxygen compound; nitrogen compound; nitrogen group element compound; air; gas; soil component; component
CLASSIFICATION CODE(S): FB04040C

10/9/5 (Item 1 from file: 203)
DIALOG(R)File 203:AGRIS

01587213 AGRIS No: 92-037522
Sulfur transformation in lowland rice soils and its management
Xie, Liangshang
Philippines Univ., Los Banos, College, Laguna (Philippines)
Thesis Degree: Thesis (M.S. in Soil Science)
Publisher: , College, Laguna (Philippines), Sep 1989, 143 leaves
Notes: 2 ill.; 21 graphs; 49 tables. Bibliography (140 ref.). Appendices. Received Jan 1990
Language: English Summary Language: English
Place of Publication: Philippines
Document Type: Monograph, Dissertation, Bibliography, Summary, Nonconventional Literature
Journal Announcement: 1804 Record input by Philippines
Abstract in English
Transformation of added 35SO42- [sulfate ion] in two selected lowland rice soils were investigated. Under submerged condition, **reduction** of 35SO42- to 35S2- rapidly increased at initial incubation period and then maintained an almost consistent rate. Application of Sesbania or rice straw significantly aggravated sulfate **reduction** and hydrogen sulfide volatilization. Under 80% of field capacity condition, Banauang sandy loam soil incubated without organic material had higher capacity to return added 35SO42- than San Pablo clayey soil. However, the rate of sulfide formation was almost equal in both soils when organic material was applied. At 60 days under flooded condition, more inorganic S was incorporated to organic forms than under optimum **moisture** condition. Oxidation of 35S0 was affected by soil type, **moisture** condition, application rate and presence of **plant** . In Banauang sandy loam soil, there was more 35SO ion released than in San Pablo clayey soil. Under 80% of field capacity condition the oxidation rate was significantly higher than under-water-logged condition. A rate of 25 mgS/kg soil had a higher oxidation of elemental S than of 12.5 mgS/kg soil in both soils under both **moisture** conditions. The presence of rice **plant** had desirable effect on the oxidation of elemental S. An average percentage of oxidized elemental S increased from 6.09% to 22.96% in Banauang soil and increased from 7.20% to 29.94% in San Pablo soil when planted to rice. Generally, **plant** height, tiller number, dry matter production, and **plant** yields (straw and grain) significantly increased with the application of A, P or Zn. The levels of responses to these elements were dependent on soil condition and stages of **plant** growth.

Descriptors in English: *ORYZA SATIVA; *SESBANIA; *RICE STRAW; *LOWLAND; *SULPHATES; *HYDROGEN SULPHIDE; *OXIDATION; *YIELDS; *PHILIPPINES; ACIDS; ASIA; BYPRODUCTS; CEREAL BYPRODUCTS; CHEMICAL REACTIONS; GRAMINEAE; INORGANIC ACID SALTS; INORGANIC ACIDS; INORGANIC COMPOUNDS; LEGUMINOSAE; ORYZA; PAPILIONOIDEAE; PHYSIOGRAPHIC FEATURES; SALTS; SOUTH EAST ASIA; STRAW;

Descriptors in Spanish: *ORYZA SATIVA; *SESBANIA; *PAJA DE ARROZ; * TIERRAS BAJAS; *SULFATOS; *SULFURO DE HIDROGENO; *OXIDACION; * RENDIMIENTO; *FILIPINAS; ACIDOS; ACIDOS INORGANICOS; ASIA; ASIA SUDORIENTAL; ASPECTOS FISIOGRAFICOS; COMPUESTOS INORGANICOS; GRAMINEAE; LEGUMINOSAE; ORYZA; PAJA; PAPILIONOIDEAE; REACCIONES QUIMICAS; SALES; SALES DE ACIDOS INORGANICOS; SUBPRODUCTOS; SUBPRODUCTOS DE CEREALES;

Descriptors in French: *ORYZA SATIVA; *SESBANIA; *PAILLE DE RIZ; *REGION DE BASSE ALTITUDE; *SULFATE; *SULFURE D'HYDROGENE; *OXYDATION; * RENDEMENT; *PHILIPPINES; ACIDE; ACIDE MINERAL; ASIE; ASIE DU SUD EST; COMPOSE MINERAL; ELEMENT GEOMORPHOLOGIQUE; GRAMINEAE; LEGUMINOSAE; ORYZA ; PAILLE; PAPILIONOIDEAE; REACTION CHIMIQUE; SEL; SEL D'ACIDE MINERAL; SOUS PRODUIT; SOUS PRODUIT DE CEREALES;

Section Headings: P35 (NATURAL RESOURCES -- Soil fertility)
?

```
### Status: Path 1 of [Dialog Information Services via Modem]

### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 3106900061...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
### Status: Signing onto Dialog
 ********
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
### Status: Connected


Dialog level 99.12.23D

Last logoff:  24feb00 17:58:29
Logon file001 25feb00 11:46:33
*** ANNOUNCEMENT ***
UPDATING RESUMED
***Kansas City Star (File 147)
                            ***
RELOADED
***Kompass Latin America (File 586)

     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                    ****
For news about price changes for Jan 1, 2000, enter
HELP NEWRATES.
                    ****

File   1:ERIC  1966-1999/Dec
       (c) format only 2000 The Dialog Corporation
*File   1: File has been reloaded. See HELP NEWS 1.
Limits of /ED and /EJ currently not working.

      Set  Items  Description
      ---  -----  -----------
?file agri
       25feb00 11:46:50 User259868 Session D12.1
            $0.19    0.055 DialUnits File1
     $0.19  Estimated cost File1
     $0.01  TYMNET
     $0.20  Estimated cost this search
     $0.20  Estimated total session cost   0.055 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File   5:Biosis Previews(R)  1969-2000/Jan W2
         (c) 2000 BIOSIS
*File   5: Updates renamed. See Help News5.
  File   6:NTIS  64-2000/Mar W2
         Comp&distr 1998 NTIS, Intl Copyright All Righ
  File  10:AGRICOLA  70-2000/Feb
         (c) format only 2000 The Dialog Corporation
  File  28:Oceanic Abst.  1964-2000/Mar
         (c) 2000 Cambridge Scientific Abstracts
  File  34:SciSearch(R) Cited Ref Sci  1990-2000/Feb W3
         (c) 2000 Inst for Sci Info
  File  44:Aquatic Sci&Fish Abs  1978-2000/Mar
         (c) 2000 FAO (for ASFA Adv Brd)
  File  50:CAB Abstracts  1972-2000/Feb
```

```
        (c) 2000 CAB International
   File  60:CRIS/USDA  1998/Sep
        (c) format only 1998 The Dialog Corporaion pl
   File  65:Inside Conferences  1993-2000/Apr W2
        (c) 2000 BLDSC all rts. reserv.
   File  76:Life Sciences Collection  1982-2000/Dec
        (c) 2000 Cambridge Sci Abs
   File  94:JICST-EPlus  1985-2000/Nov W1
        (c)2000 Japan Science and Tech Corp(JST)
   File  98:General Sci Abs/Full-Text  1984-1999/Oct
        (c) 1999 The HW Wilson Co.
   File  99:Wilson Appl. Sci & Tech Abs  1983-2000/Dec
        (c) 2000 The HW Wilson Co.
   File 117:Water Resour.Abs.  1967-2000/Jan
        (c) 2000 Cambridge Scientific Abs.
   File 143:Biol. & Agric. Index  1983-2000/Dec
        (c) 2000 The HW Wilson Co
   File 144:Pascal  1973-2000/Jan
        (c) 2000 INIST/CNRS
   File 203:AGRIS  1974-2000/Oct
        Dist by NAL, Intl Copr. All rights reserved
   File 266:FEDRIP  1999/DEC
        COMP & DIST BY NTIS, INTL COPYRIGHT ALL RIGHTS RES
   File 306:Pesticide Fact File  1998/Jun
        (c) 1998 BCPC
*File 306: File has been updated & reloaded.  See HELP NEWS 306.  New
Bluesheet available in F415 & at URL http://library.dialog.com/bluesheets.
  File 434:SciSearch(R) Cited Ref Sci  1974-1989/Dec
        (c) 1998 Inst for Sci Info

      Set  Items  Description
      ---  -----  -----------
?s plant(w) transformation
Processed  10 of  20 files ...
Completed processing all files
        3876935  PLANT
         622121  TRANSFORMATION
      S1    1527  PLANT(W) TRANSFORMATION
?s s1 (w) whatman?
           1527  S1
           1419  WHATMAN?
      S2      0  S1 (W) WHATMAN?
?s s1 (w) explant
           1527  S1
          18669  EXPLANT
      S3      0  S1 (W) EXPLANT
?s s1 (s)whatman?
           1527  S1
           1419  WHATMAN?
      S4      0  S1 (S)WHATMAN?
?s s1(s)explant
           1527  S1
          18669  EXPLANT
      S5     14  S1(S)EXPLANT
?rd
>>>Duplicate detection is not supported for File 60.
>>>Duplicate detection is not supported for File 306.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
      S6      5  RD (unique items)
?t

 6/2/1     (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
(c) 2000 BIOSIS. All rts. reserv.
```

12040895 BIOSIS NO.: 199900321414

Plant regeneration from mature Avena tissue explants.

AUTHOR: Hassan G(a); Zipf A(a); Sharma G C(a); Wesenberg D
AUTHOR ADDRESS: (a)Department of Plant and Soil Science, Alabama A and M University, Normal, AL, 35762**USA

JOURNAL: Cereal Research Communications 27 (1-2):p25-32 1999
ISSN: 0133-3720
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

REGISTRY NUMBERS: 94-75-7: 2 4-D; 1918-00-9: DICAMBA; 1918-02-1: PICLORAM

DESCRIPTORS:
- MAJOR CONCEPTS: Agronomy (Agriculture); Methods and Techniques
- BIOSYSTEMATIC NAMES: Gramineae--Monocotyledones, Angiospermae, Spermatophyta, Plantae
- ORGANISMS: Avena (Gramineae)--grain crop
- BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Angiosperms; Monocots; Plants; Spermatophytes; Vascular Plants
- CHEMICALS & BIOCHEMICALS: dicamba--plant growth regulator; picloram--plant growth regulator; 2,4-D--plant growth regulator
- METHODS & EQUIPMENT: embryo explant culture--tissue culture method; hypocotyl explant culture--tissue culture method

CONCEPT CODES:
- 52504 Agronomy-Grain Crops
- 32500 Tissue Culture, Apparatus, Methods and Media
- 51514 Plant Physiology, Biochemistry and Biophysics-Growth Substances
- 51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods

BIOSYSTEMATIC CODES:
- 25305 Gramineae

Set	Items	Description
S1	1527	PLANT(W) TRANSFORMATION
S2	0	S1 (W) WHATMAN?
S3	0	S1 (W) EXPLANT
S4	0	S1 (S)WHATMAN?
S5	14	S1(S)EXPLANT
S6	5	RD (unique items)

6/9/1 (Item 1 from file: 5)

12040895 BIOSIS NO.: 199900321414

Plant regeneration from mature Avena tissue explants.

AUTHOR: Hassan G(a); Zipf A(a); Sharma G C(a); Wesenberg D
AUTHOR ADDRESS: (a)Department of Plant and Soil Science, Alabama A and M University, Normal, AL, 35762**USA

JOURNAL: Cereal Research Communications 27 (1-2):p25-32 1999
ISSN: 0133-3720
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: Successful **plant transformation** is dependent upon a reliable plant regeneration system. In cereals, immature embryos are the explants of choice but are inconvenient due to their temporal nature and maintenance requirements. The effects of three different auxins, 2,4-D, dicamba, and picloram, on two mature tissue **explant** types, mature embryo and hypocotyl, of three Avena genotypes, GAF/Park, Park, and 88Ab3073, were evaluated for callus formation, somatic embryogenesis (SE), and plant regeneration capabilities. Both mature embryo and hypocotyl explants were proliferated on modified Murashige and Skoog (MS) basal medium containing 5, 10, and 20 muM of each auxin and were regenerated on 1/2-MS medium without hormone. Although plant number was significantly correlated with SE number, it was not absolutely linked to a priori somatic embryogenesis, especially for 88AB3073 explants. While stimulating callus growth, both dicamba and picloram decreased embryogenicity and regenerability over that obtained with 2,4-D. Picloram may be useful for the isolation of SE-related genes as somatic embryogenesis in oat callus was strongly inhibited in the presence of picloram.

REGISTRY NUMBERS: 94-75-7: 2 4-D; 1918-00-9: DICAMBA; 1918-02-1: PICLORAM
DESCRIPTORS:
MAJOR CONCEPTS: Agronomy (Agriculture); Methods and Techniques
BIOSYSTEMATIC NAMES: Gramineae--Monocotyledones, Angiospermae, Spermatophyta, Plantae
ORGANISMS: Avena (Gramineae)--grain crop
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Angiosperms; Monocots; Plants; Spermatophytes; Vascular Plants
CHEMICALS & BIOCHEMICALS: dicamba--plant growth regulator; picloram--plant growth regulator; 2,4-D--plant growth regulator
METHODS & EQUIPMENT: embryo explant culture--tissue culture method; hypocotyl explant culture--tissue culture method
CONCEPT CODES:
52504 Agronomy-Grain Crops
32500 Tissue Culture, Apparatus, Methods and Media

51514 Plant Physiology, Biochemistry and Biophysics-Growth Substances
51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods
BIOSYSTEMATIC CODES:
25305 Gramineae

6/9/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

10704323 BIOSIS NO.: 199799325468
High frequency shoot regeneration from leaf explants of muskmelon.
AUTHOR: Yadav R C; Saleh Mohamed T; Grumet Rebecca(a)
AUTHOR ADDRESS: (a)Hortic. Dep., Mich. State Univ., East Lansing, MI 48824 **USA
JOURNAL: Plant Cell Tissue and Organ Culture 45 (3):p207-214 1996
ISSN: 0167-6857
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Efficient in vitro plant regeneration systems are critical for many purposes including **plant transformation** . Current regeneration systems for melon (Cucumis melo L.) plants generally utilize cotyledon explants; regeneration from melon leaves has received limited attention. We investigated several factors that influence regeneration from melon leaves including: genotype growth conditions and age of the source plant, leaf age, **explant** orientation, gelling agent, and the addition of silver nitrate and sulfonylurea herbicide to the culture media. Critical factors that influenced regeneration were preculture conditions of the donor plants, leaf size, and the use of silver nitrate and Phytagel in the medium. The best results were obtained with 3-4 cm diam leaves excised from pot grown greenhouse or growth chamber plants cultured on MS medium with 5 mu-M IAA, 5 mu-M BA, 1 mu-M ABA, 30 mu-M silver nitrate and 2.6 g l-1 Phytagel. Low concentrations of sulfonylurea herbicide (0.25 mg l-1 DPX-M 6316) also enhanced regeneration. Under optimized conditions 80-100% of the explants regenerated, with 10-100 shoots per **explant** .

REGISTRY NUMBERS: 7761-88-8: SILVER NITRATE; 74-85-1: ETHYLENE; 71010-52-1: PHYTAGEL; 21293-29-8: ABSCISIC ACID; 1214-39-7: BENZYLADENINE; 87-51-4: INDOLE-3-ACETIC ACID; 86-87-3Q: NAPHTHALENEACETIC ACID; 26445-01-2Q: NAPHTHALENEACETIC ACID
DESCRIPTORS:
MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Cell Biology; Chemical Coordination and Homeostasis; Development; Methods and Techniques; Morphology; Pest Assessment Control and Management; Systematics and Taxonomy
BIOSYSTEMATIC NAMES: Cucurbitaceae--Dicotyledones, Angiospermae, Spermatophyta, Plantae
ORGANISMS: muskmelon (Cucurbitaceae); Cucumis melo (Cucurbitaceae)
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): angiosperms; dicots; plants; spermatophytes; vascular plants
CHEMICALS & BIOCHEMICALS: SILVER NITRATE; ETHYLENE; PHYTAGEL; ABSCISIC ACID; BENZYLADENINE; INDOLE-3-ACETIC ACID; NAPHTHALENEACETIC ACID
MISCELLANEOUS TERMS: Research Article; ABSCISIC ACID; AGE; BENZYLADENINE; CONDITIONS; COTYLEDON; DEVELOPMENT; ETHYLENE ACTION INHIBITOR; EXPLANT; GELLING AGENT; GENOTYPE; GROWTH; HERBICIDE; HIGH FREQUENCY REGENERATION; IN VITRO PLANT REGENERATION; INDOLE-3-ACETIC ACID; LEAF; METHODOLOGY; MISCELLANEOUS METHOD; MURASHIGE AND SKOOG MEDIUM; NAPHTHALENEACETIC ACID; ORIENTATION; PHYTAGEL; PLANT GROWTH REGULATOR; SHOOT; SILVER NITRATE; SULFONYLUREA
CONCEPT CODES:
02504 Cytology and Cytochemistry-Plant
10060 Biochemical Studies-General
50526 Botany, General and Systematic-Dicotyledones
51000 Morphology, Anatomy and Embryology of Plants

51510 Plant Physiology, Biochemistry and Biophysics-Growth, Differentiation
51514 Plant Physiology, Biochemistry and Biophysics-Growth Substances
51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods
54600 Pest Control, General; Pesticides; Herbicides
BIOSYSTEMATIC CODES:
25890 Cucurbitaceae

6/9/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09674295 BIOSIS NO.: 199598129213
The competence of cells for cell division and regeneration in tobacco explants depends on cellular location, cell cycle phase and ploidy level.
AUTHOR: Gilissen Luud J W(a); Van Staveren Marjo J; Hakkert Johanna C; Smulders Marinus J M; Verhoeven Harrie A; Creemers-Molenaar Jantina
AUTHOR ADDRESS: (a)Dep. Cell Biol., DLO-Cent. Plant Breed. Reprod. Res., P.O. Box 16, NL-6700 AA Wageningen**Netherlands
JOURNAL: Plant Science (Limerick) 103 (1):p81-91 1994
ISSN: 0168-9452
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: This work concerns application of flow cytometry (FCM) and confocal laser scanning microscopy (CLSM) to investigate the competence of cells for cell division and regeneration. FCM analysis of freshly-cut thin cell layer (TCL) explants of Nicotiana tabacum, excised from upper internodes of vegetative plants, revealed that one-quarter of the cells had the 2C nuclear DNA content, whereas of the other cells most nuclei had the 4C and some had the 8C DNA content. Cytometric examination using CLSM showed that the 2C nuclei were mainly located in the epidermis and subepidermis, and the 4C nuclei predominantly in the cortical tissue. During culture of the explants, part of the cortical cells went through mitosis from the first day onwards, and formed callus from which predominantly diploid and some tetraploid roots regenerated at low frequency. Most cortical cells were thus in the G-2 phase of the diploid cell cycle. FCM analysis showed that another fraction of the 4C cortical cells was induced to endoreduplicate to 8C cells. These cells thus had previously switched to the G-1 phase of the tetraploid cell cycle. CLSM analysis revealed that subepidermal and epidermal cells, respectively, underwent cell division from the second and third day onwards. Shoot primordia developed from cells of both cell layers together. Most shoot regenerants were normal diploids, some were mixoploids or tetraploids. The combination of FCM and CLSM allowed identification of the cell cycle phase, the ploidy level, the position of the cell, and the cellular development. The results give insight into the involvement of these parameters in the competence for cell division and regeneration at the level of the individual **explant** cells, and are therefore relevant for cellular and molecular approaches to **plant transformation** .

DESCRIPTORS:
MAJOR CONCEPTS: Cell Biology; Development; Genetics; Methods and Techniques
BIOSYSTEMATIC NAMES: Solanaceae--Dicotyledones, Angiospermae, Spermatophyta, Plantae
ORGANISMS: Nicotiana tabacum (Solanaceae)
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): angiosperms; dicots; plants; spermatophytes; vascular plants
MISCELLANEOUS TERMS: CONFOCAL LASER SCANNING MICROSCOPY; FLOW CYTOMETRY ; PLANT TRANSFORMATION
CONCEPT CODES:
02504 Cytology and Cytochemistry-Plant

03504 Genetics and Cytogenetics-Plant
32500 Tissue Culture, Apparatus, Methods and Media
51510 Plant Physiology, Biochemistry and Biophysics-Growth, Differentiation
51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods
01052 Microscopy Techniques-General and Special Techniques
BIOSYSTEMATIC CODES:
26775 Solanaceae

6/9/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09542573 BIOSIS NO.: 199497550943
Factors that affect leaf regeneration efficiency in apple, and effect of antibiotics in morphogenesis.
AUTHOR: Yepes Luz Marcella; Aldwinckle Herb S
AUTHOR ADDRESS: Dep. Plant Pathol., Cornell Univ., NYS Agric. Exp. Stn., Geneva, NY 14456**USA
JOURNAL: Plant Cell Tissue and Organ Culture 37 (3):p257-269 1994
ISSN: 0167-6857
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Several factors that affect the frequency of organogenesis in apple leaf explants were examined for the scion cultivars 'Empire', 'Freedom', 'Golden Delicious', 'Liberty', 'McIntosh', and 'Mutsu' and for the rootstocks Malling 7A and Malling 26. The main factors affecting morphogenesis were BA concentration, basal medium, leaf **explant** origin and maturity, **explant** orientation, and photosynthetic photon flux. Depending on the genotype, optimal regeneration was obtained using either 22.2 or 31.1 mu-M BA and the N6 basal medium, with the exception of 'Golden Delicious' which regenerated better on MS medium. After 6 weeks, the average number of shoots per segment varied from 5 to 16, and the percentage of regeneration between 70 and 100%, depending on the genotype tested and the maturity of the **explant** . Regeneration capacity increased dramatically from the tip towards the base of the leaf, and was higher from the middle to the proximal end. Cefotaxime and carbenicillin, two antibiotics commonly used during transformation studies to eliminate Agrobacterium tumefaciens from plant tissue, were tested to determine their effect on morphogenesis. Cefotaxime at a dose of 250 mg 1-1 enhanced regeneration and shoot development, whereas carbenicillin at a dose of 500 mg 1-1 induced abundant callus formation and inhibited regeneration. Kanamycin, a widely used selection agent for **plant transformation** , strongly inhibited regeneration even at very low doses. Schemes for selection and recovery of transgenic apple plants when kanamycin is used as the selection agent are discussed.

REGISTRY NUMBERS: 1214-39-7: BENZYLADENINE; 63527-52-6: CEFOTAXIME; 4697-36-3: CARBENICILLIN; 59-01-8Q: KANAMYCIN; 8063-07-8Q: KANAMYCIN
DESCRIPTORS:
MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Development; Genetics; Infection; Methods and Techniques; Morphology; Pest Assessment Control and Management; Physiology
BIOSYSTEMATIC NAMES: Rhizobiaceae--Eubacteria, Bacteria; Rosaceae--Dicotyledones, Angiospermae, Spermatophyta, Plantae
ORGANISMS: Agrobacterium tumefaciens (Rhizobiaceae); Malus domestica (Rosaceae)
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): angiosperms; bacteria; dicots; eubacteria; microorganisms; plants; spermatophytes; vascular plants
CHEMICALS & BIOCHEMICALS: BENZYLADENINE; CEFOTAXIME; CARBENICILLIN; KANAMYCIN
MISCELLANEOUS TERMS: BASAL MEDIUM; BENZYLADENINE CONCENTRATION; CALLUS

FORMATION; CARBENICILLIN; CEFOTAXIME; CULTIVAR EMPIRE; CULTIVAR FREEDOM ; CULTIVAR GOLDEN DELICIOUS; CULTIVAR LIBERTY; CULTIVAR MCINTOSH; CULTIVAR MUTSU; EXPLANT ORIENTATION; GENOTYPE; KANAMYCIN; LEAF EXPLANT ORIGIN; PHOTOSYNTHETIC PHOTON FLUX; REGENERATION INHIBITION; ROOTSTOCK MALLING 26; ROOTSTOCK MALLING 7A

CONCEPT CODES:

03504 Genetics and Cytogenetics-Plant
10010 Comparative Biochemistry, General
31000 Physiology and Biochemistry of Bacteria
32500 Tissue Culture, Apparatus, Methods and Media
51000 Morphology, Anatomy and Embryology of Plants
51510 Plant Physiology, Biochemistry and Biophysics-Growth, Differentiation
51524 Plant Physiology, Biochemistry and Biophysics-Apparatus and Methods
54504 Phytopathology-Diseases Caused by Bacteria
54600 Pest Control, General; Pesticides; Herbicides
10060 Biochemical Studies-General
25508 Developmental Biology-Embryology-Morphogenesis, General

BIOSYSTEMATIC CODES:

06509 Rhizobiaceae (1992-)
26675 Rosaceae

6/9/5 (Item 1 from file: 203)

DIALOG(R)File 203:AGRIS

02018105 AGRIS No: 96-105731

Histology of somatic embryogenesis and evaluation of somaclonal variation ([Histologia de embriogenesis somatica y evaluacion de variacion somaclonal])

Raemakers, C.J.J.M.; Jacobsen, Evert; Visser, Richard G.F.

Conference Title: 2.The Cassava Biotechnology Network
Conference Location and Year: Bogor (Indonesia), 2-26 Aug 1994

The Cassava Biotechnology Network : proceedings of the second international scientific meeting, Bogor, Indonesia, 22-26 August 1994 ([La red de biotecnologia de yuca : memorias de la segunda reunion cientifica internacional, Bogor, Indonesia, 22-26 agosto 1994])

Centro Internacional de Agricultura Tropical, Cali (Colombia)
Publisher: CIAT , Cali (Colombia), 1995, v. 1 p. 336-354
Series title: Working document (CBN; CRIFC; AARD; CIAT), no. 150
Notes: (Accession no. SB211.C3C372)
Notes: Ill., 18 ref.
Language: English Summary Language: English
Place of Publication: Colombia
Availability: CIAT (Intl Centre for Tropical Agriculture) Center
Document Type: Analytic, Monograph, Conference, Summary, Nonconventional Literature
Journal Announcement: 2209 Record input by CIAT (Intl Centre for Tropical Agriculture)

Abstract in English

Genetic modification of cassava is dependent on the availability of efficient regeneration procedures and the resulting plants should be true to type. A system has been developed where somatic embryos can be culture to produce secondary embryos (cyclic somatic embryogenesis). The origin of secondary embryos was studied using histological and scanning electron microscopical techniques. It was concluded that secondary embryos originate directly from the **explant** , from internal cell layers and from multiple cells. These three characteristics explain the difficulties observed in using somatic embryogenesis for **plant transformation** purposes. Strategies to overcome these problems will be discussed. Further, it was observed that most mature embryos did not possess a root meristem because of the callusing effect of 2,4-D. This might explain the difficulties observed with shoot conversion of somatic embryos. An advantage of the multicellular origin of somatic embryos is the fact that

it might give rise to genetically stable plants. Although a clear example of genetic induced variation was found, it was concluded that the regeneration process was not accompanied with clear negative plant development characteristics.

Descriptors in English: *MANIHOT ESCULENTA; *IN VITRO CULTURE; *SOMATIC EMBRYOS; *EMBRYONIC DEVELOPMENT; *PLANT TISSUES; BIOLOGICAL DEVELOPMENT; CULTURE TECHNIQUES; DEVELOPMENTAL STAGES; EUPHORBIACEAE; MANIHOT; PLANT ANATOMY; PLANT DEVELOPMENTAL STAGES; PLANT EMBRYOS;

Descriptors in Spanish: *MANIHOT ESCULENTA; *CULTIVO IN VITRO; *EMBRION SOMATICO; *DESARROLLO EMBRIONARIO; *TEJIDOS VEGETALES; ANATOMIA DE LA PLANTA; DESARROLLO BIOLOGICO; EMBRIONES VEGETALES; ETAPAS DE DESARROLLO; ETAPAS DE DESARROLLO DE LA PLANTA; EUPHORBIACEAE; MANIHOT; TECNICAS DE CULTIVO;

Descriptors in French: *MANIHOT ESCULENTA; *CULTURE IN VITRO; *EMBRYON SOMATIQUE; *DEVELOPPEMENT EMBRYONNAIRE; *TISSU VEGETAL; ANATOMIE VEGETALE; DEVELOPPEMENT BIOLOGIQUE; EMBRYON VEGETAL; EUPHORBIACEAE; MANIHOT; STADE DE DEVELOPPEMENT; STADE DE DEVELOPPEMENT VEGETAL; TECHNIQUE DE CULTURE;

Section Headings: F02 (PLANT PRODUCTION -- Plant propagation) ; F62 (PLANT PRODUCTION -- Plant physiology - growth and development)

?

PLEASE ENTER A COMMAND OR BE LOGGED OFF IN 5 MINUTES

?